

Amendments to the Claims:

1) canceled.

2) (currently amended): A process or system for improving watermark detection comprising: [[by]]  
receiving an image; and  
applying different compensation to the [[an]] image in the "x" and "y" (that is, the vertical and horizontal) directions to reduce artifacts eliminate anomalies introduced by a printer or scanner which differ in the "x" and "y" directions.

3) (currently amended): In a system that includes a scanner that includes a down loadable tone map, a scanner driver that includes a calibrated tone map for the scanner and user controls which control modification of said calibrated tone map to generate a user adjusted tone map, said scanner generating an image which has been modified by said user controlled tone map,  
the an improvement comprising a program to reverse an the action on said image of the user modifications to said calibrated tone map.

4) (currently amended): A method of reading a watermark or pattern from a digital image generated by a scanner from a hard-copy image, said digital image most nearly matching said hard-copy image when the image generated by said scanner is modified in accordance with a calibrated tone map, said method comprising: comprising,  
down-loading into said scanner a user modified tone map,

modifying said image in said scanner with said user modified tone map,  
transferring said scanner modified image to a computer communicating with  
attached to said scanner,

modifying said modified image with a tone map that reverses any differences  
between said calibrated tone map and said user modified tone map to generate a  
reverse modified tone map, and

reading said watermark or detecting said pattern in said image.

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5) (currently amended): A method of controlling operations with data carried in  
a physical image comprising: the steps of:

scanning said physical image with a scanner which has an associated calibrated  
tone map which will compensate for differences between an the image generated by  
said scanner and the characteristics of said physical image,

adjusting said calibrated tone map in accordance with user supplied parameters  
to produce a user adjusted tone map,

applying said user adjusted tone map to said image to produce a user desired  
image,

applying a tone map to said user desired image which is an the inverse of  
adjustments the changes made to said calibrated tone map to produce generate said  
user adjusted desired tone map, to generate an image that corresponds to the image  
generated by said scanner that is compensated by said calibrated tone map,

reading at least one characteristic a characteristics of said image, and

controlling said operations with the result of said reading step.

6) (original): The method recited in claim 5 wherein said reading step reads a  
digital watermark from said image.

7) (original): The method recited in claim 5 wherein said reading step detects a shape in said image.

8) (currently amended): The method recited in claim 5 wherein said reading step reads attempts to both read a digital watermark from said image and to detect and detects a shape in said object.

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9) (currently amended): A method of operating on an image comprising: the steps of

generating a first digital image from a physical document,  
applying a first tone map to said image to generate an adjusted digital image,  
applying a [[an]] second tone map to said adjusted digital image to generate  
generated a corrected digital image, said second tone map adapted to reverse [[an]]  
changes made to said first digital image that differ from changes specified by [[a]]  
reference data calibrated tone map, and  
operating upon said corrected digital image to determine characteristics of said  
corrected digital image.

10) (original): The method recited in claim 9 wherein said corrected digital image  
is operated upon to read a digital watermark from said corrected digital image.

11) (currently amended): The method recited in claim 9 wherein said corrected  
digital image is operated upon to detect a pattern in ~~from~~ said corrected digital image.

12) (currently amended): A system which includes:  
a scanner which has an the ability to apply a tone map to a scanned image, and  
a data source which calculates a user adjusted tone map by applying to a calibrated  
tone map user established parameters, said data source having an the ability to down  
load said user adjusted tone map to said scanner, said scanner adapted to apply  
applying said user adjusted tone map to said scanned image to generate an adjusted  
image,

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color*  
an inverse user adjustment program that generates a corrected image by  
applying to said adjusted image a tone map that reverses changes made to said  
calibrated tone map to generate said user adjusted tone map, and  
a program for detecting characteristics of data in said image.

13) (original): The system recited in claim 12 wherein said program for detecting  
characteristics of data in said image comprises a watermark reading program.

14) (original): The system recited in claim 12 wherein said program for detecting  
characteristics of data in said image comprises a program for detecting shapes in said  
image.

15) (currently amended): A system for operating on an image comprising:  
an image acquisition device for generating a first digital image from a physical  
document, said image acquisition device applying a first tone map to said first digital  
image to generate an adjusted digital image,  
an inverse user adjustment program for applying a second tone map to said  
adjusted digital image to generate generated a corrected digital image, said second tone

map adapted to reverse [[an]] changes made to said first digital image that differ from changes specified by a calibrated tone map, and

a program which operates upon said corrected digital image to determine characteristics of said corrected digital image.

16) (original): The system recited in claim 15 wherein said program which operates upon said corrected image is a watermark reading program.

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17) (currently amended): The system recited in claim 15 wherein said program which operates upon said corrected image is a program which detects particular shapes in said corrected image.

18) (currently amended): A system for operating on an image comprising:  
acquisition means for acquiring a first digital image from a physical document,  
said acquisition means applying a first tone map to said first digital image to generate an adjusted digital image,

means for applying a second tone map to said adjusted digital image to generate generated a corrected digital image, said second tone map adapted to reverse [[an]] changes made to said first digital image that differ from changes specified by a calibrated tone map, and

detection means for operating upon said corrected digital image to determine characteristics of said corrected digital image.

19) (original): The system recited in claim 18 wherein said detection means comprises a watermark reading program.

20) (currently amended): The system recited in claim 18 wherein said acquisition means comprises [[is]] a scanner.

21) (currently amended): The system recited in claim 18 wherein said detection means comprises ~~comprises~~ a program to detect a shape in an image.

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*John* 22) canceled.

23) (currently amended): The system recited in claim 18 wherein said acquisition means comprises [[is]] a ScanJet 6300c scanner.

24) (currently amended): A method of creating a digital image that corresponds to an image on a physical document, said method comprising:  
scanning said physical document with a scanner to produce a first digital image, and the frequency response of said scanner decreasing at higher frequency values, and filtering said first digital image with a filter which compensates for the frequency response of said scanner.

25) (currently amended): A system which includes:  
a TWAIN compliant scanner which has an the ability to apply a tone map to a scanned image, and a TWAIN data source which calculates a user adjusted tone map by applying to a calibrated tone map user established parameters, said TWAIN data source having an the ability to down load to said scanner said user adjusted tone map, said scanner adapted to apply applying said user adjusted tone map to said scanned image to generate an adjusted image,

an inverse user adjustment program that generates a corrected image by applying to said adjusted image a tone map that reverses changes made to said calibrated tone map to generate said user adjusted tone map, and  
a computer program ~~for~~ which examines characteristics of said corrected image.

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26) (original): The system recited in claim 25 wherein said program is adapted to read a digital watermark in said image.

27. (new): A method comprising:  
receiving image data from an optical scanner, wherein the image data corresponds to a physical object, and wherein the image data comprises adjustments reflecting user-dependent factors;

adjusting the image data to counter-balance at least some of the adjustments attributable to the user-dependent factors, said adjusting yielding adjusted image data;  
and

analyzing the adjusted image data to find at least one of machine-readable indicia and a predetermined pattern.

28. (new): The method of claim 27, wherein the optical scanner comprises a digital camera.

29. (new): The method of claim 27, wherein the machine-readable indicia comprises digital watermarking.